

Marron Valley

8.2.1



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8.2.1.a *Marron Valley (MM 1)*

Site Description and Existing Conditions

The Marron Valley (MM 1) vernal pool site is located on 2,644 acres owned and managed by the City of San Diego Water Department. This remote area is located approximately 25 miles east of the Pacific Ocean along the U.S./Mexico border. The site is within the Marron Valley Conservation Bank, which is included in the MSCP Cornerstone Lands. Marron Valley is within the MHPA, however this site is not zoned or within a Community Planning Area because it is outside City of San Diego boundaries.

Fourteen vernal pools (739 m² of basin area [7954.529 ft²]) were mapped at Marron Valley. All vernal pools are natural. Soils on-site include Huerhuero loam and Visalia gravelly sandy loam, with non-native grasses and forbs (including *Erodium* spp.) and southern mixed chaparral in the upland areas. Populations of *M. minimus* and *B. sandiegonensis* occur at Marron Valley.

The site was leased for grazing until 2001, and impacts from cattle (e.g., hoof indentations) are still visible in vernal pool basins.

The *Marron Valley Preserve Wildland Fire Management Plan* (Tierra Data 2006) was completed through funding from the California Department of Fish and Game. The *Plan* assesses the impact of high fire frequency on natural resources such as vernal pools and included the installation of no-trespassing signs around vernal pools and other sensitive areas.

The Marron Valley vernal pools will be fenced and restored through a SANDAG TransNet grant awarded to the City and County of San Diego in 2006. Restoration will include invasive species removal; dethatch of non-native grasses and hand-reshaping of basins, as necessary.

Threats

Development

Marron Valley is conserved.

Invasive Species

The primary herbaceous species at Marron Valley are grasses, and *Erodium* spp. which are often found within the vernal pool basins.

Trespass

There is minimal trespass through this site from ORVs due to locked gates at the perimeter of the preserve. This area is frequented by Border Patrol, but the major threat to this area results from the high intensity foot traffic of immigrants. Impacts from trampling of sensitive vegetation, litter and an unnaturally short fire interval are all visible in Marron Valley as a result of undocumented migrants. In addition, cattle from Mexican lands cross the river to feed in preserved areas in Marron Valley.

Wildland Fire/Fire Suppression

Marron Valley is part of a large rural preserve system where fire plays an important part in the natural ecologic regime. While some of the vernal pools do not appear to burn

frequently, others are in areas with burn frequencies of 10-15+ years based on data from 1969-2006. *M. minimus* has been observed at the basins with a low burn frequency, and *B. sandiegonensis* are present at basins in all burn frequency locations. Therefore, fire does not appear to have impacted the fairy shrimp populations, and further study is needed to determine the relationship, if any, to occurrence of *M. minimus*.

The *Marron Valley Preserve Wildland Fire Management Plan* (Tierra Data 2006) was completed in March, 2006, through Local Assistance Grant funding. The *Plan* includes information on fire behavior in Marron Valley, recommends actions to restore a more natural fire regime and facilitates interagency communication in the event of fire to minimize risk of impacts from fire suppression activities. In addition, the grant funded installation of signs to restrict access of fire crews in sensitive resource areas.

Current Management Activities

Access to the area supporting vernal pools is limited by the Water Department, which provides patrols, fencing, and signage.

Signage has been installed through the Marron Valley Fire Management Plan to minimize the potential of impacts to sensitive resources during fire suppression activities. In addition, fuel management actions are being undertaken by the California Department of Forestry in accordance with the recommendations of the *Plan*.

Funding was secured by the City of San Diego through a SANDAG grant to reshape basins that have been impacted by cattle and/or off-road vehicles, conduct aggressive invasive species removal and fence the vernal pools in Marron Valley.

Management Recommendations

The Vernal Pool Management Plan (City of San Diego, 1996) made the following recommendations for this site: Investigate previously unidentified resources, conduct assessment of vernal pool resources, conduct inspections of physical conditions and restore disturbed areas. The first three recommendations have been accomplished as part of the 2002-2003 Vernal Pool Inventory (City of San Diego, 2004). Restoration of disturbed areas is currently being planned and funded through a SANDAG grant.

The vernal pools at Marron Valley should be managed in accordance with the *Draft Marron Valley Management Plan* (CBI 2001).

Management of the area should be consistent with the *Marron Valley Preserve Wildland Fire and Management Plan* (Tierra Data Inc., 2006) in order to bring the fire frequency to a more normal level and create an optimum environment for the vernal pool species found in Marron Valley.

In enhancement and/or restoration projects conducted at Marron Valley, priority should be given to preservation of the *M. minimus* and *B. sandiegonensis*, which are the farther southeast occurrence of this species on City lands. All restoration shall use seeds and/or cysts from the Marron Valley populations.

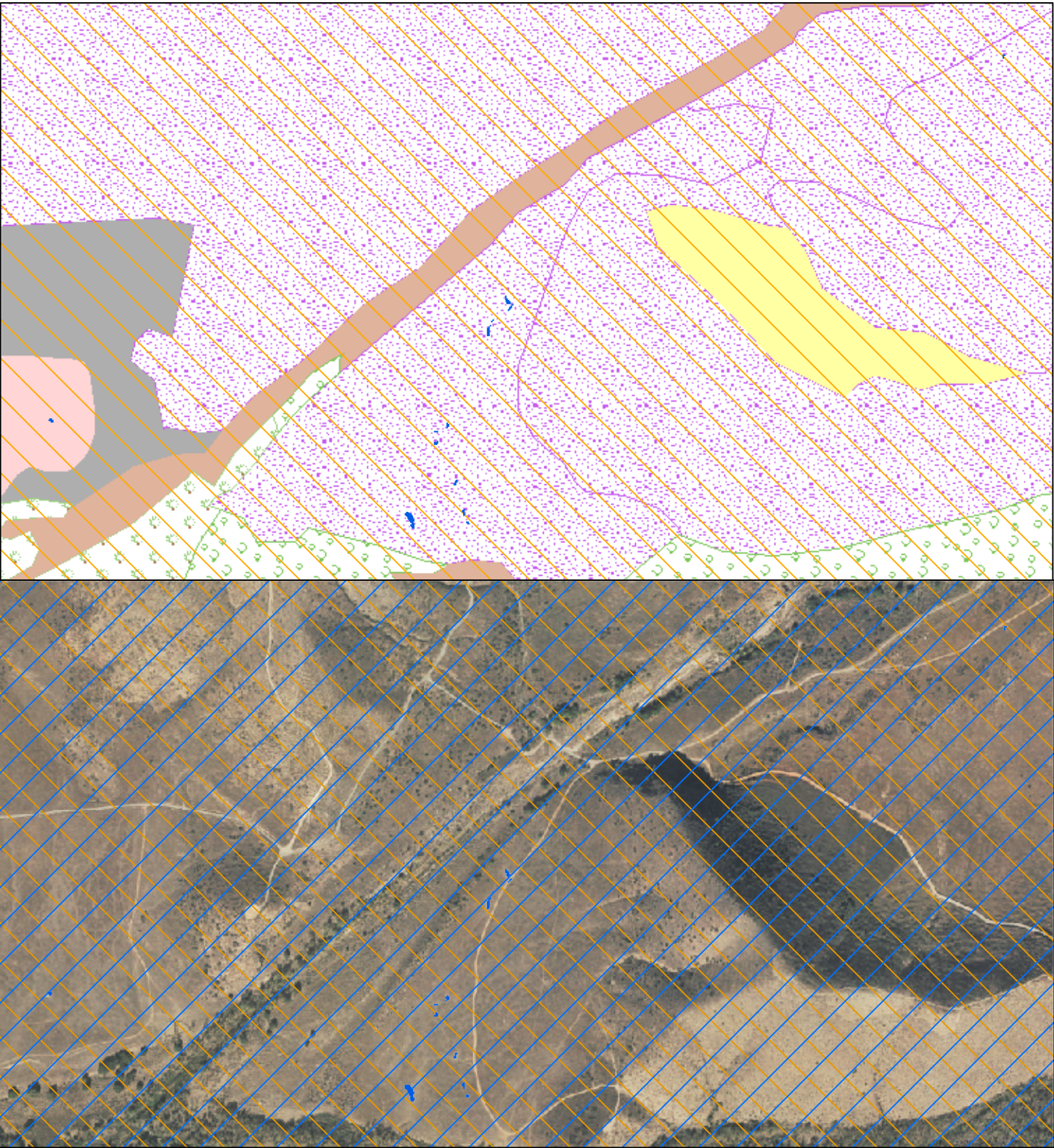
The appropriateness of a vernal pool creation project in the old artichoke field, located north of the Tijuana River and west of Cottonwood Creek, should be determined. If appropriate, pursue grant funding to complete the project.

To maintain the condition of the area, the site manager should continue to limit access through gates, fencing and patrols.

Non-native species such as *Erodium* spp. have invaded many of the vernal pool basins at Marron Valley. Any enhancement and/or restoration efforts conducted at this site should include a weed eradication program to restore native species composition to the vernal pools.

Studies of the effects of high fire frequency should be encouraged.

Figure 71



Marron Valley (MM 1)



0.1 Miles
0.3 Kilometers

- Roads
- MHPA
- Conserved Lands
- Vernal Pools at Site
- Adjacent Vernal Pools
- Coastal Sage Scrub
- Maritime Succulent Scrub
- Chaparral
- Riparian Forest
- Oak Riparian Forest
- Riparian Scrub
- Disturbed Land
- Agriculture
- Urban/Developed

Note: MHPA and Roads not shown in top map; vegetation mapping per Ogden 1997.